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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,069	01/20/2004	Katsuhisa Yamada	2018-831	7170

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EXAMINER

PRINCE, FRED G

ART UNIT PAPER NUMBER

1724

DATE MAILED: 10/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/759,069

Applicant(s)

YAMADA ET AL.

Examiner

Fred Prince

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8, 10-19 and 21-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17-19 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 8, 10-12, 15, 16 and 21-27 is/are rejected.
- 7) ☒ Claim(s) 3, 5-7, 13 and 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Allowable Subject Matter*

1. The indicated allowability of claims 1-8, 10-13, 17-18, and 21-26 is withdrawn in view of the reference(s) to Rickle (US 2003/0132156), Shioda et al. (US Pat No 5,582,729), Cain (US Pat No 5,049,271), and Bell (US Pat No 4,312,753). Rejections based on the cited reference(s) follow.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-2, 4, 8, 10-12, 15-16, 21, 23, 26, and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Rickle.

Rickle teaches a fuel filter comprising a bag-shaped filter body that includes: an outer layer (52) that is made of nonwoven fabric; and an inner layer (paragraph 0030) that is made of filter paper and is connected to the outer layer and forms an inside layer of the filter body to remove debris included in fuel, a resinous molded section (46;

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paragraph 0022), a suction pipe (104), a mounting unit provided along a longitudinal direction (Figure 2), including a first member (70A), a second member (104), and a third member (42), a connector (110) to which an external device (134) is connectable to an engage section (120) in an axial direction, wherein fuel passes through the filter body from the outer layer toward the inner layer (14; paragraph 0021), a connector (110) to which an external device (134) is connectable.

4. Claims 10, 12, 15, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Shioda et al.

Shioda et al. teach a fuel suction side of a fuel supply device, the fuel filter comprising: a filter body (2) that removes debris included in fuel; a suction pipe section (5) that connects between the filter body and the fuel supply device (1) to conduct fuel from the filter body to the suction pipe section; and a mounting unit (11) that secures the fuel supply device to the filter body, a molded section (B) on the periphery of the body, an engage section (18) engaging the mounting unit in an axial direction (Fig. 1; col. 2, lines 59-63), wherein the mounting unit is provided along a longitudinal direction of the filter body (Figs. 4 and 6).

5. Claims 10, 12, 15-16, 21, 23, and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Cain (US Pat No 5,049,271).

Cain teaches a fuel suction side of a fuel supply device, the fuel filter comprising: a filter body (20) that removes debris included in fuel; a suction pipe section (34) that connects between the filter body and the fuel supply device (12) to conduct fuel from the filter body to the suction pipe section; and a mounting unit including a first member (32),

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second member (34) comprising a suction pipe and fitting section (35,38), and third member (30) that secures the fuel supply device to the filter body, a molded section (28; col. 2, lines 43-45) on the periphery of the body, an engage section (18) engaging the mounting unit in an axial direction (Fig. 1; col. 2, lines 59-63), wherein the mounting unit is provided along a longitudinal direction of the filter body (Fig. 2) and the second member has a projecting section (Fig. 2) provided on an end of the suction pipe section which is located on an opposite side with respect to the fitting section; and the projecting section radially outwardly projects and fits to an end of the third member which is arranged on the opposite side with respect to the first member (Fig. 2).

6. Claims 10, 12, 15, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Bell (US Pat No 4,312,753).

Bell teaches a fuel suction side of a fuel supply device, the fuel filter comprising: a filter body (14) that removes debris included in fuel; a suction pipe section (44) that connects between the filter body and the fuel supply device (12) to conduct fuel from the filter body to the suction pipe section; and a mounting unit (22, 28") that secures the fuel supply device to the filter body, a molded section (22,24) on the periphery of the body, an engage section (col. 4, lines 40-41) engaging the mounting unit in an axial direction (Fig. 1), wherein the mounting unit is provided along a longitudinal direction of the filter body (Fig. 2).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over any one of Rickle, Cain, and Bell in view of Fischer et al. (US Pat No 6,833,070).

Rickle, Cain, and Bell are described above. None of the references discloses a housing having a "claw" engaging a fitting section.

In any case, Fischer et al. disclose the well known concept of providing a housing with a "claw" (Fig. 2) in order to, for example, couple a fitting to a fuel pump without additional parts (col. 2, lines 36-39).

9. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable either Rickle or Cain.

The above references are described above. Neither reference discloses integrally forming the second and third members.

It is submitted that it is conventional in the art to integrally mold connectable members in order to, for instance, reduce the complexity of assembling separate components or reduce the number of components to be connected (see, for example, US Pat No 4,312,753 to Bell).

Accordingly, it would have been readily obvious for the skilled artisan to modify the mounting unit of either Rickle or Bell such that the second and third members are

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integrally molded in order to, for instance, reduce the complexity of assembling separate components or reduce the number of components to be connected, as known in the art.

***Allowable Subject Matter***

10. Claims 17-19 allowed.

11. Claims 3, 5-7, and 13-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Per claims 3, 5-6, and 12, the prior art fails to teach or fairly suggest the recited a connector having the recited positioning and operational elements. The instant invention provides the benefit of reducing vibrations.

Per claim 7, the prior art fails to teach or render obvious the filter paper layer having the recited components. The instant invention provides strength, while preserving molding capabilities of the filter.

Per claim 14, the prior art fails to teach or fairly suggest the fuel filter having the central axes of the recited components in the same plane. The instant invention reduces the height of the assembly and reduces installation space.

Per claim 17, while it is known in the art to provide a filter having a fuel suction side of a fuel supply device, the fuel filter comprising: a filter body that removes debris included in fuel; a suction pipe section that connects between the filter body and the fuel supply device to conduct fuel from the filter body to the suction pipe section; and a mounting unit that secures the fuel supply device to the filter body, a molded section on

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the periphery of the body, an engage section engaging the mounting unit in an axial direction, wherein the mounting unit is provided along a longitudinal direction of the filter body (see, for example, any of the primary references applied above), in the examiner's opinion, the prior art fails to teach or fairly suggest the fuel filter further comprising an arm section that extends from the filter body toward the fuel supply device, and surrounds an outside of the fuel supply device in a peripheral direction of the fuel supply device.

### ***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. References are cited of interest to show the state of the art.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred Prince whose telephone number is (571) 272-1165. The examiner can normally be reached on Monday-Thursday, 6:30-4:00; alt. Fridays 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Fred Prince  
Primary Examiner  
Art Unit 1724

fgp  
10/12/05